



FIRE DOOR

Installation Guide

Effective February 2018



CF5324 A0000000
DOOR-STOP INTERNATIONAL
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Fire Door Certification invalid unless installed and maintained exactly in accordance with Manufacturer's instructions and this label is retained unmarked and not removed.



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FOR TRACEABILITY DO NOT REMOVE DS JOB NUMBER LABELS FROM FRAME OR LEAF

Before you start

These instructions must be read and completely understood before any work commences.

Do not remove existing door until you have checked...

- The sizes are correct and you have everything as ordered
- The paperwork to ensure it is the correct specification
- Any damage to the door (do not install a damaged door)

Health and Safety

Care should be taken when handling the door - help should be sought due to it's weight.

Avoid sharp edge.

Keep electrical leads and cables away from sharp and abrasive surfaces and protect against tension and moisture. An RCD breaker should be used as per manufacturer's instructions to protect from electric shocks.

Keep children and pets away from building operations.

All waste products should be disposed of correctly and safely.

Fire Door Installation

WALL TYPE	This door set must only be installed in walls with at least 30 minute fire resistance. The walls must be brick, blockwork, timber or steel stud all of minimum 85mm thickness.
CERTIFICATION	Look for the Certifire label on the top of the door leaf to show that the door is independently 3rd party certified as a fire door and closely follow these installation instructions. The Certifire label on the top of the door leaf must not be removed.
COMPATIBILITY	Essential Ironmongery such as locks, latches, closers and hinges MUST not be changed. Replacements must be supplied by Door Stop International.
ALTERATIONS	Cutting apertures for glazing and air transfer grilles, modifying the door or resizing the door or fame in any way is not allowed.
GAPS	The gap between the leaf and frame when closed should be no greater than 5mm and no less than 3mm.
OPERATION	Check that the closer shuts the door onto the latch from any position.

Recommended tools

- Tape measure
- Hammer
- Utility knife
- Flat & round Crowbar
- Chisel
- Electric drill with hammer action
- Silicone sealant gun
- Fine tooth saw
- Rubber mallet
- 600 and 1800mm Spirit levels
- T15 Torx Pozi drive and Slotted Screwdrivers
- Masonry & General drill bits

Removing the Existing Door

Remove the existing door leaf.

To help reduce the damage to wall decorations and plaster, score around the perimeter of the frame with a knife. Saw through the jambs and remove. The best way to do this is by sawing diagonally in the center and removing them in two sections.

Do not saw them all the way through as this can cause damage to the internal reveals or structure. If there is a chance this will happen, use a bearing block to protect the plaster and render, then lever the jambs away from the walls and complete the cuts.

Remove the top and bottom rails in the same way.

Preparing the Opening

Once the door has been removed, ensure the opening is free from screws, nails, fillers and mastic.

Repair the opening surround, as required.

The opening should be complete before fitting the door set.

Check there's a lintel or other load transferring structure fitted above the doorway (our doorsets are not load bearing).

To prevent fire penetration between frame and wall the maximum allowed gap is 10mm. See also section on Sealing around the perimeter.

Door Alignment

The positioning of the door within the brickwork is vital to the correct functioning of the door.

- Frame is square and plumb in both planes
- Door outerframe set back as far as possible to reduce exposure to elements
- Bridge the wall cavity
- Fit above the DPC
- Frame is square and not twisted

Top Light and Sidepanel Glazing Instructions

Top lights will be supplied as a separate item, and you will be required to glaze once the frame has been installed. As this product is a fire door, you must follow these instructions, do not substitute any materials specified, as this will invalidate the product Certifire certification.

Top lights will be semi-glazed, in-so-far that the glass will be in the frame, held secure with glazing clips and two short lengths of glazing bead. To fit the top light, first remove the glazing bead and glazing clips before lifting out the Double glazed unit. Glazing clips are removed by sliding them slightly to the side and then pulling them outwards.

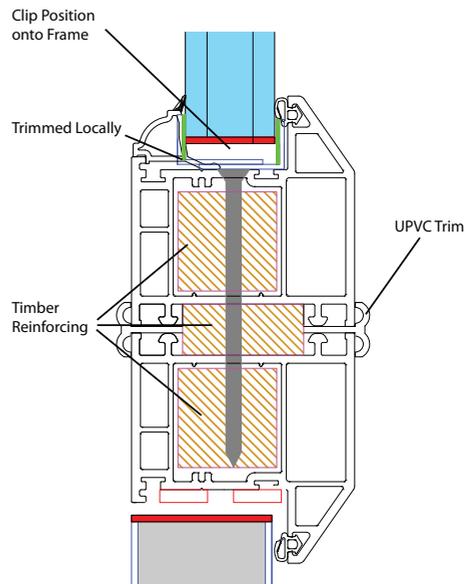


With the glass removed, you will be able to see the glazing clips that have been installed in the factory. The locking clip is a two part system.

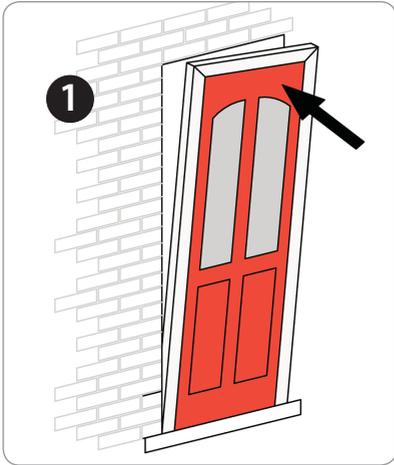
To ensure the top light is attached correctly, the plastic coupler will be fitted in the factory, and the top light frame will have pre-drilled holes to ensure the screw placement is within the scope approved by Certifire. In addition to this, the correct number/type of fixings for the top light will also be supplied as part of your ancillary pack.

Using the 90mm x 4.8mm countersunk screws provided, attach the top light frame to the door frame (see right)

Only once the frame (including top light) has been installed into the property, do you re-glaze the top light.



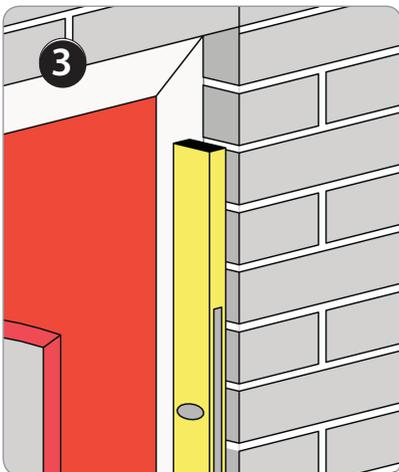
Door set installation



Offer complete door set into the opening.

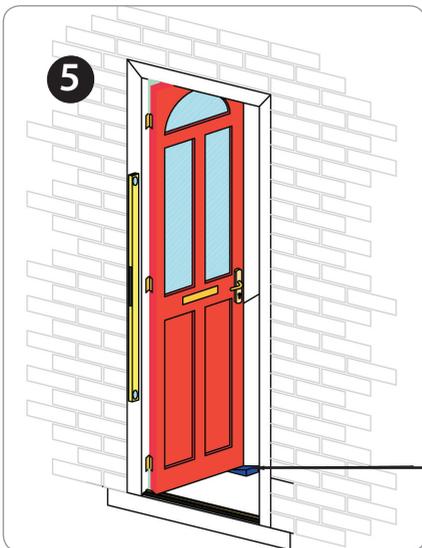
Hold frame into position using wedge. Packers must be located adjacent to fixing positions to prevent distortion of the outer frame when frame fixings are tightened. Failure to adhere to this may result in door function issues.

MAXIMUM FRAME TO WALL GAP 10mm



Spirit level (1600m Long) should be used to ensure jambs are square and plumb in all planes.

The leaf may be removed from the frame to ease installation. Final adjustments to frame position may be necessary when using fixed hinges. Once square and plumb, fix as per instructions. (See fixing positions)

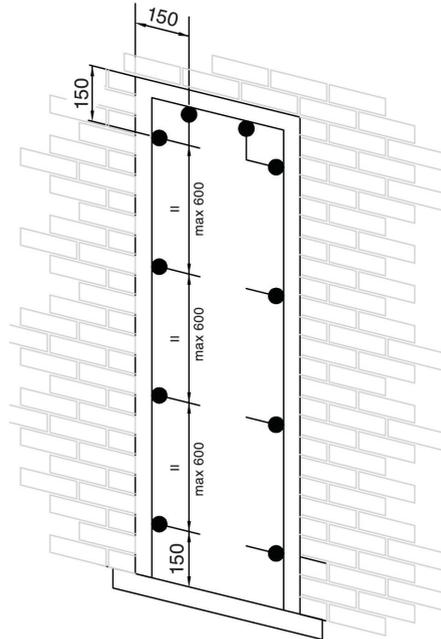


Pack the bottom of the door leaf at the leading edge to assist getting square into outerframe.

Fixing positions

Fix frame into wall with 4 metal frame screws in each leg, maximum spacing 600mm and one fixing in each leg of the over panel if fitted.

The frame screws may be nylon sheathed and must be long enough to penetrate at least 50mm into the wall



Topbox & Side Panel

Fixings into building structure ●

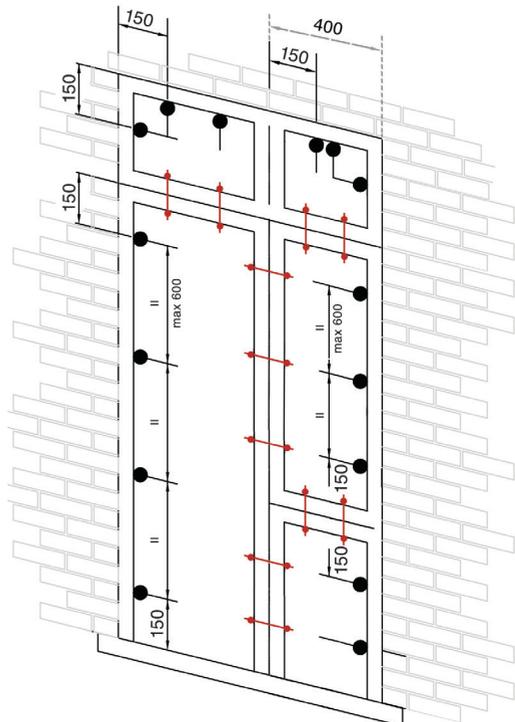
Each frame (ie. Doorframe, Lower Sidepanel, Upper Sidepanel, and Topbox) is to be fixed through to the wall with fixings at maximum 600mm centres, with the outer jamb fixings no more than 150mm from the frame corners.

In addition, the door frame jamb must use a minimum of 4 fixings. The fixings must be steel, and must penetrate the wall at least 50mm.

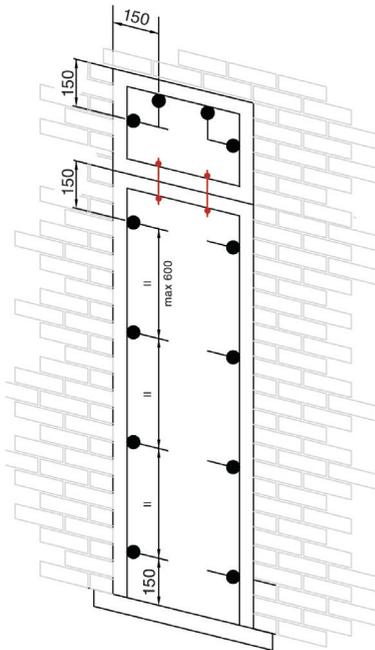
Fixings between frames ●—●

ie. Doorframe to Lower Sidepanel, Doorframe to Upper Sidepanel, Doorframe to Topbox, Upper Sidepanel to Topbox, and Lower Sidepanel to Upper Sidepanel.

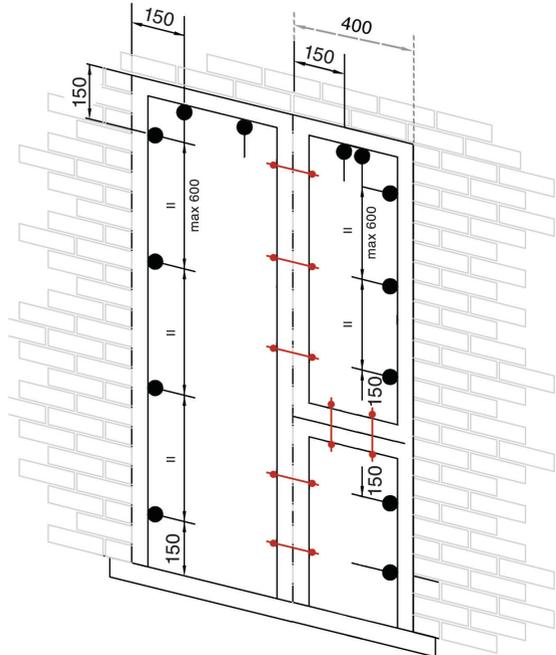
Frames must be fixed using 4.8 x 90mm Countersunk head steel screws at maximum 600mm centres, with the outer fixings no more than 150mm from the frame corners.



Topbox



Side Panel



Drilling

Drill holes through the frame as indicated (ensuring the holes are as recommended by the frame fixing manufacturer).

Secure the frame to the structure (Avoid fixing in to mortar joints) with suitable frame fixings. Ensure the fixing is secure and correctly positioned in the brickwork.

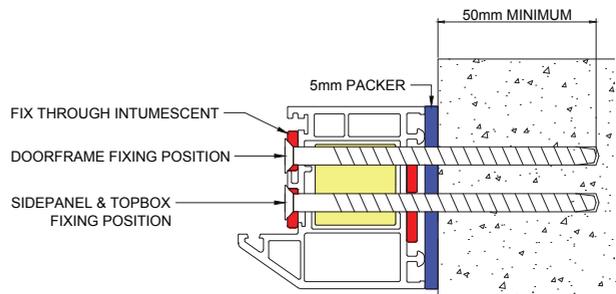
Fixings

The outer frame should be secured into the solid structure of the building using industry standard 8 or 10 mm frame fixings a minimum of 110 mm long, anchored into the structure of the building by a minimum of 50 mm.

The fixings are allowed to penetrate the intumescent strips – see drawing.

Use packing pieces behind every fixing point to ensure the frame is square, and clearance between door and frame is even to all edges, then tighten the fixings to secure the frame.

NB: Care should be taken not to overtighten the fixings to avoid distortion of the frame.



Re-Glazing Top Light and Sidepanels

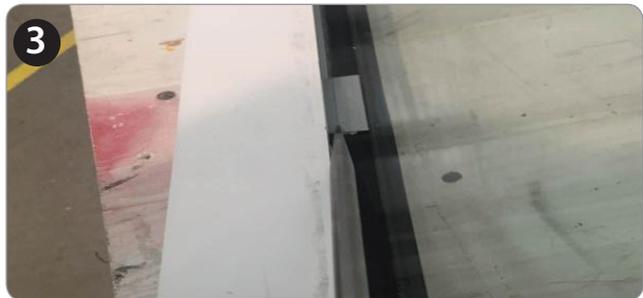


When handling glass, care must be taken to ensure the factory fitted fire tape (Intumescent) is not damaged during the glazing process.



Lower the glass into the frame, making sure the intumescent tape is not damaged, and the glass sits squarely on all of the glazing clips.

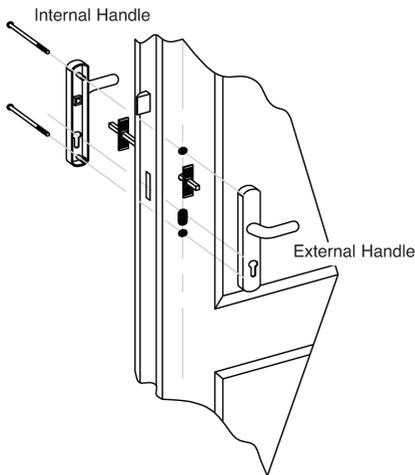
Inserting the glazing clips back over the glazing clip screws, carefully engage the clip by sliding the clip into the 'locked' position.



Using a rubber mallet, fix the glazing bead in place to secure the Double glazed unit. NB/ The glass is fragile and extra care must be taken.



Fixing Ironmongery



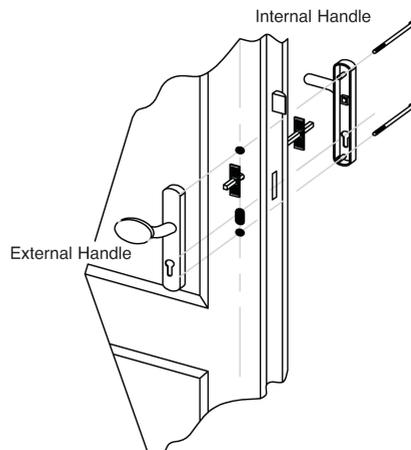
NB: When the door has been fixed into position the operation of the door opening and locking mechanism must be checked to ensure uniform contact with weather seals and correct function of handle/lock.

Fixings

To fit door handle set, locate spindle through square hole in lock mechanism. Align projecting pins on internal half of door handle set with pre-drilled holes in door slab.

Ensure handle spring washers are in position and secure using fixing screws supplied.

NB: If your furniture selection is split spindle handle, discard spring loaded plate and insert the supplied locking plate. Note the shorter spindle must be used.



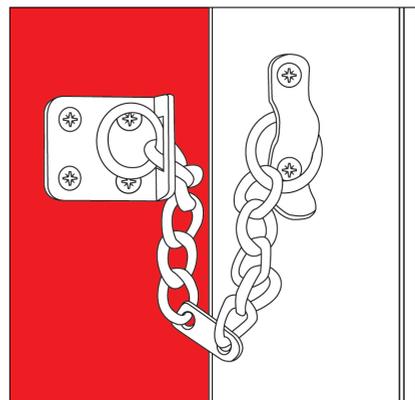
Fixing Security Chain

The security chain should be positioned into the desired location for ease of use (i.e. to suit the persons who will be required to use the device) Mark the fixing positions onto the door/frame using the pre-drilled holes in fittings as a template. Move the security chain and drill pilot holes in the marked positions, use the screws provided to secure.

NB: Care should be taken when the fittings are positioned to ensure the security chain will function correctly.

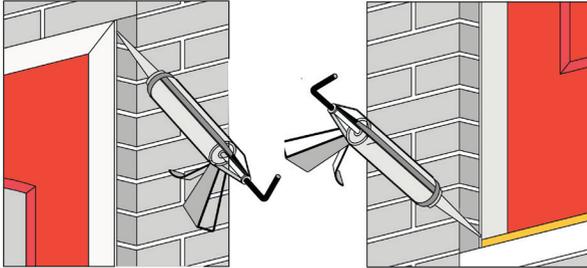
Fixing Decorative Numerals

Numerals should be located in the desired position on the composite door, when satisfied this is correct, the holes in the numerals should be used as a template to mark the required pilot holes to fix. Drill pilot holes and use the screws provided to secure to the door.



Sealing around the perimeter

Please note maximum wall to frame gap is 10mm. If wall to frame gap is more than 3mm the gap must be filled with tightly packed mineral wool.



Silicone sealant or similar suitable product should be used to seal around the perimeter of the newly installed composite door frame. Ensure that an adequate barrier is formed to prevent water ingress/air leakage.

NB: Care must be taken to ensure that the drainage slots are not blocked when sealing around the aluminium wheelchair threshold.

Overhead Door Closer Fitting Instructions

In case where a door closer has been supplied, the frame and leaf will have pilot holes added in the factory. This will ensure the door closer is positioned in the correct position in regards to the doorset specified.



1 Identify the pre-drilled pilot holes on the leaf and frame



2 Position the door closer body over the pre-drilled pilot holes.



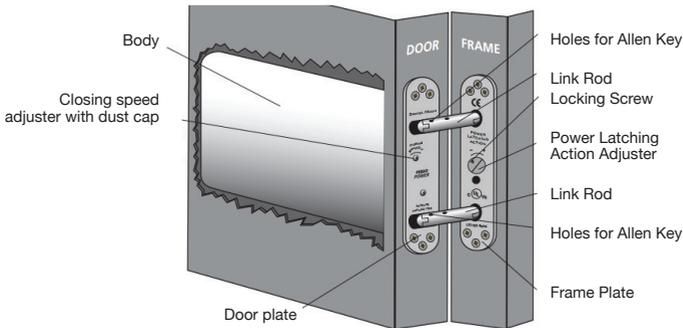
3 Fix the closer body to the leaf using the pre-drilled pilot holes and screws supplied. Do not substitute these fixings.



4 Secure the closing arm and cover plate. Check operation and adjust the closing forces to meet the application.

Please see door closer instruction for more details.

Perko Powermatic Integral Door Closer Fitting Instructions



1 Insert closer body into routing detail already prepped in to the door leaf.

Insert extractor bolt into position and rotate clockwise until holes in link rods appear.

2 Insert an allen key through both top & bottom link rod holes.

Both allen keys must be correctly located.

Remove extractor bolt.

Secure door plate to door leaf with the six screws provided.

3 With the door now held open by allen keys (if necessary firmly push both link rods across door plate and offer frame plate into frame void, and secure with the six screws provided).

Open door slightly and remove allen keys.

Installation is now complete

4 Remove dust cap.

Use one of the allen keys to adjust closing speed.

Positive (+) increases door speed. Negative (-) reduces door speed, as indicated on the door plate.

5 The power latch action can be adjusted using a flat head screwdriver.

Loosen locking screw using allen key to allow the adjuster screw to turn.

Positive (+) increases angle at which latching action engages. Negative (-) decreases angle at which latching action engages.

Re-tighten locking screw when correct power latching action achieved.

It is highly recommended to fit a doorstop when using an integral closer as the maximum opening angle is 105 degrees. This will avoid pulling on the frame.

Astra Closer Setting Instructions

Door Set Installation

Ensure that the frame is set into the opening plumb, and that there is an equal gap around the slab to frame. Do not rely on the brickwork, as the closers performance will be adversely effected if the door set is not squarely installed. The closer performance is factory tested in every case, therefore if you encounter a problem, please check the frame is square before making any other adjustments.

Adjusting The Door Closing Speed

The closer is supplied factory fitted and set to latch on the first time of opening. This will allow the installer to secure the door set into the opening. Once the door set has been secured, you will be required to set the closing speed.

The closing speed adjustment pin is located inside the body of the closer, above or below the fixing link. The closing speed can be altered by opening the door to 90° and turning the adjuster pin with a small flat head screwdriver, clockwise to decrease speed or anticlockwise to increase speed.



Important Notes, Please Read Prior To Installing This Door Set

- Supplied with the door set is a retaining plate, this should be kept in a safe place and used to lock the closer before any work is carried out on the door. It is dangerous to remove the closer plate screws without first placing the retaining plate in position.
- You are advised to use an approved installer when removing this product. It is potentially dangerous to remove or tamper with this product.
- Poor ventilation and limited air flow may, like other closers, affect the performance of this closer. Consider each application on its own merits and environmental conditions.
- It is important the frame is fitted squarely, and that there is an even gap around the door leaf to ensure correct performance.
- The door closer is designed to open to a maximum of 105° when installed.
- Do not change the fixed butt hinges with any other type of hinge, as this will invalidate the Certifire certification and may adversely effect the closer's performance.
- It is essential that the fixing plate centres are exactly in line with each other when the door is closed after installation. The gap between the fixing plates when closed should be no greater than 5mm and no less than 3mm.

Please see door closer instruction for more details.

Thermal movement definition and tolerances

All composite slabs, as do UPVC and timber, experience thermal movement. The slab will recover to its flat plane, to a maximum bow of 3mm side to side and 5mm top to bottom, when the installation recommendations are applied (see below).



Vertical

Deflection of the slab inwards and outwards from top to bottom.

Maximum bow permitted is 5mm measured from the middle of the slab.

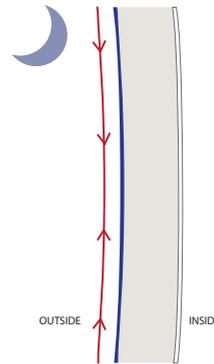
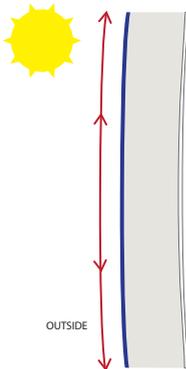
Horizontal
Deflection of the slab inwards and outwards from side to side.



Maximum bow permitted is 3mm measured from the middle of the slab.

Slackening off the lock keeps will compensate for the movement of the slab within these tolerances. The hooks of the multipoint lock must be in compression with the inner edge of the pocket keep. If this does not happen the door may move to the inside of the property (towards the cold side) and give the impression the door is bowed. It is important to ensure the centre keep for the latch only allows the door to become flush with the inner face of the outer frame and not any tighter as this could also cause the door to appear bowed.

Cut out and leave for the homeowner



If the hooks on the multipoint lock are not thrown throughout the day and the centre keep setting is too tight, the top and bottom of the door will be in unsupported tension and will eventually stand proud of the inner face of the profile. This will make the hooks on the lock become stiff, as they cannot draw themselves into the hook keep. **Protect your door from natural thermal distortion. Make sure the top and bottom locking points are engaged by pulling the handle up every time you shut the door.**

If these points are not observed the warranties on the functionality and operation of the door could be affected. Condensation issues are typically building ventilation related, not product related.

For further information, contact recognised trade organisations.



Keep this number safe for your reference.

Door Number

D	S								
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Certifire No

C	F	5	3	2	4										
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This 'DS Job Number' (or Door Number) can also be found on the inside top of your door's frame, as shown. Do not remove the DS job number labels from frame or leaf for traceability.



Removal of the Certifire label will invalidate its fire certification



All information in this manual is provided for guidance only.

Door-Stop International Ltd cannot be held responsible for the way in which the information in this manual is interpreted.

We reserve the right to alter specifications and descriptions without prior notice as part of our policy of continual development.

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